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REMARKS – General

By the above amendment, the applicant has rewritten all the claims to define the invention more particularly and distinctly so as to overcome the technical
5 rejections and define the invention patentably over the prior art.

Claim Rejections Under 35 USC § 112 have been overcome

The applicant has amended claim 14,15,17 to avoid Rejections Under 35 USC §
10 112 as pointed out by last OA. Accordingly applicant submits that the new claims do comply with § 112 and therefore requests withdrawal of these rejections.

Claim Rejections Under 35 USC § 112 have been overcome

15 The applicant has amended claim 7-14 to avoid Rejections Under 35 USC § 112 as pointed out last OA. Accordingly applicant submit that the new claims do comply with § 112 and therefore requests withdrawal of these rejections.

Claim Objections have been overcome

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The applicant has amended claim 7-14 to avoid Claim Rejections as pointed out by last OA. Accordingly the applicant requests withdrawal of these rejections.

Objection to Claim Rejections Under 35 USC § 103

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The last O.A. rejected the Claims 6-8 as being unpatentable "over Mahany [US 6,665,536] in view of Koenck et al. [Pub. No.: US 2004/0166895]". Applicant requests withdraw of these rejections for the following reasons:

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- 1) Mahany does not provide wireless to wireless redundancy.
- 2) Mahany only provides wireless to hose LAN backup connection.
- 3) Mahany does not provide one wired network to another wired network over redundant wireless connection.
- 5 4) The design and system means are dissimilar because of the system purpose and functional difference.
- 5) The new combination dose not change or increase the function and network of Mahany to match with the application's current invention.

Further in details:

10 The last OA points out that "two separate wireless networking radios (see fig.5, radio 64, 62) that can communicate with remote correspondent wireless networking radio (see fig.5 remote radio 72, remote radio 74) forming a wireless networking sub-link via antenna means (antenna 30, dedicate wireless link, non-dedicate link, col.6, ln.4-23)". However, according to

15 Mahany:

Two separate wireless networking radios do communicate with remote corresponding wireless networking radios. Specifically:

One wireless link is formed as "Once communications with an upstream access point (35) is established, each access point (35 and 36) will dedicate
20 one of its wireless adapters (39 and 42, respectively) to provide a wireless repair of the break (45) in the infrastructure (33)" (col.6, ln4-8).

The other two radio of each AP are still communicating with other devices but not with each other (between themselves) correspondingly, as "However, the non dedicated wireless adapters (38 and 43) will continue to communicate
25 with the roaming computer devices. (col.6, ln.15-17)"

The last OA further points out (Mahany provides) "processor means running system feature for SE (see figure 5, CPU with access point 60); one wired LAN interface for connecting to computer LAN (see figure 5, there should be a connector between the access point 60 and line that connected to the host

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computer network)". The applicant understands that Mahany does provide a CPU and wired LAN interface. However, referring to the discussion above and following in this OA response, Mahany's disclosure has completely different networking function and system architecture. Mahany's disclosure is to provide wireless access point uplink (with first radio wirelessly) to support the using second antenna providing wireless access for local roaming wireless devices. The applicant's current invention is to provide two separate wired networks communicating with each other via the redundant wireless link formed by two pairs of corresponding radios of two RWNL devices. Mahany dose not provide wired LAN to wired LAN communication. Therefore, the processor means is not running the system feature of the SE of the applicant's current invention.

The last OA further points out "Wherein the processor means running redundant communication features means for communicating with remote said RFWL device (see figure 5, the processor of the access point 60 control the redundancy of the link. At the normal communication, the access point 60 communicate with remote access point 70 via a dedicate link to communicate between access point 60 and access point 70 via radio 64 and radio 74, col.6, ln.1-67); and whereby said two separate wireless networking radios are attaching to processor means via said connection (see figure 5, radio 62, radio 64, CPU, they are connected by a connector); and wherein said two separate wireless networking radios can communicate to the correspondent wireless networking radios remote said RFWL device (see figure 5, radio 62, radio 72 are communicated by a dedicate link, radio 64, radio 74 are communicated by non-dedicate link)." However, according to Mahany: There is no redundancy provided in figure 5 embodiment. In this embodiment, the AP 70 is a standalone device without backup link, "Referring now to FIG. 5, a remote access point (70) is shown connecting to the infrastructure (33)

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by means of dedicated wireless adapters (62 and 72). The access point (70) is not hard wired to the infrastructure (33)." (col.6, lns 48-52) radio 64, radio 74 are not communicating by non-dedicated link, because they are both running as wireless access point, specifically: radio 74 is providing access for one group of roaming computers as "The other wireless adapter (74) continues to communicate with roaming computer devices within the range of the access point (70)." (col.6, lns 53-56); and, radio 64 is providing access for one other group of roaming computers as "The access point (60) can continue to service the roaming computer devices within its range through the wireless adapter (64)" (col.6, lns 60-63). Mahany does not intend nor any need for radio 64 to communicate with radio 74. Assuming even if radio 64, radio 74 can communicate to each other via non-dedicate link, still much more new features needed to be add to Mahany's disclosure. Further, even if so, the networking scheme is still different. The main function of the applicant's current invention is to communicate between main network (fig.3, 311) and client network (fig.3, 312) via wireless communication link formed by SE (fig.3, 10) and CE (fig.3, 10a). There is no wired network attached to Mahany's access point (70). When the main link 30 fails, access point (70) becomes useless. Under this condition, even if radio 74 and radio 64 are communicating via non-dedicated channel as suggested by last OA, the access point (70) can still only communicating with wireless roaming device, there is never a client network attached to the wired port of access point (70). Nonetheless, deploying access point 60, and 70 close together for both channel to communicate is against the wireless LAN deployment purpose and against Mahany's purpose. This makes radio 64 impossible to communicate with radio 74 as detail discussion of follows. The purpose of this design is to extend the range of the second access point (70), as "The hard wired access point (60) which is used to connect the remote access point (70) to the infrastructure need not be the access point which is physically closest to the

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remote access point (70). Use of directional antenna would allow a remote access point to establish communication with virtually any of the access points which are hard wired to the infrastructure" (col.6 ln.64- col.7, ln.3). According to Mahany, the remote access point (70) has a high power directional antenna (see fig.5, radio 72 having high power directional antenna pointing to antenna of radio 62 forming link 30) to communicate to access point (60). Therefore the second radio (74) is off the range of radio 64. Assuming radio 74 also used same type of high power directional antenna pointing to radio 64, then AP 70 became useless because the wireless coverage area will be limited within the path of the directional antenna going towards AP 60, and AP 70 are unable to communicate with wireless roaming device around it. Doing so is against the purpose of Mahany and the wireless LAN deployment. This is another reason why radio 64 and radio 74 are not communicating via a non-dedicated link.

The last OA also points out "It should be noticed that Mahany fails to teach an interface means. However, Koenck teaches such features (see figure 49, interface 1510)." The applicant respectfully suggests even if the two were to combine, because Mahany has completely different system, network application, and functions, adding an interface does not change Mahany's disclosure to match with the embodiment of the application's current invention.

Therefore, the applicant respectfully suggests that even if Mahany adds the interfaces as taught by the last OA, the last OA pointing out "Regarding claim 6, Mahany teaches one dual-channel redundant wireless link device" is improper.

The applicant has rewritten the claim 6 now as claim 18 to reflect the differences and novelty over prior art. Accordingly applicant submits that the

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new claim does comply with § 103 and therefore requests withdrawal of these rejections.

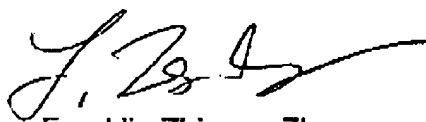
5 **Conclusion**

For all of the above reasons, the applicant submits that the claims are now in proper form, and that the claims all define patentably over the prior art. Therefore he submits that this application is now in condition for allowance, which action he
10 respectfully solicits.

Conditional Request For Constructive Assistance

Applicant has amended the specification and claims of this application so that
15 they are proper, definite, and define novel structure which is also unobvious. If, for any reason this application is not believed to be in full condition of allowance, Applicant respectfully request the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. § 2173.02 and § 707.07(j) in order that the undersigned can place this applicant in allowable condition as soon as possible
20 and without the need for further proceedings.

Very respectfully,



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